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SYSTEM AND METHOD FOR MAINTAINING A VEHICLE AT ZERO SPEED ON A GRADED SURFACE

ABSTRACT OF THE DISCLOSURE

Methods and apparatus are provided for determining when vehicle powertrain torque is being used to substantially maintain a vehicle at a substantially zero speed on a graded surface, and to shift the supplied torque from the powertrain to another vehicle system or component. A vehicle controller determines that the powertrain system is supplying a hold torque, which has a magnitude sufficient to substantially maintain the vehicle at a substantially zero speed on the graded surface. A brake torque at a magnitude at least equivalent to the hold torque is automatically applied from the vehicle brake system to thereby maintain the vehicle at the substantially zero speed. Thus, the powertrain system can remove the torque it is supplying to hold the vehicle at the substantially zero speed.